

REMARKS-General

The newly drafted independent claims 10 and 13 incorporate all structural limitations of the original claim 1 and include further limitations previously brought forth in the disclosure. No new matter has been included. All new claims 10-16 are submitted to be of sufficient clarity and detail to enable a person of average skill in the art to make and use the instant invention, so as to be pursuant to 35 USC 112.

With regard to the rejection of record based on prior art, Applicant will advance arguments to illustrate the manner in which the invention defined by the newly introduced claims is patentably distinguishable from the prior art of record. Reconsideration of the present application is requested.

Regarding to the Rejection of Claims 1-9 patent under 35USC102

The examiner rejected claims 1-9 under 35USC102(b) as being anticipated by Maus (US 6,534,021). Pursuant to 35 U.S.C. 102, "a person shall be entitled to a patent unless:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.

In view of 35 U.S.C. 102(b), it is apparent that a person shall not be entitled to a patent when his or her invention was patent in this country more than one year prior to the date of the application for patent in the United States.

However, the Maus patent and the instant invention are not the same invention according to the fact that the disclosure of Maus patent does not read upon the instant invention and the newly drafted independent claims 10 and 13 of the instant invention does not read upon Maus patent either.

The applicant respectfully identifies the differences between the instant invention and Maus for the purpose of overcoming the rejections under 35USC102(b) as follows:

(A) Regarding the newly drafted independent claim 10, Maus fails to anticipate a fluid filter, comprising:

(i) an outer casing; and

(ii) a filter assembly which is received within the outer casing, and comprises:

a plurality of corrugated filtering plates; and

a plurality of flat filtering plates alternated into the corrugated filtering plates to overlap with corrugated filtering plates in a 'Z' shape manner so as to form a filter stack of the flat filtering plates and the corrugated filtering plates, wherein each of the corrugated filtering plates has two side plain edges and a corrugated ridge, wherein each of the corrugated filtering plates is respectively welded onto a pair of the neighboring flat filtering plates at opposed edges, such that two sides of the filter stack are enclosed with Z shaped ending respectively as a fluid inlet and a fluid outlet, wherein a height of each layer of the filter stack is ranged between **2-10 mm** and a crest interval of each of the corrugated filtering plates is ranged between **4-20 mm**.

(B) Maus generally discloses a heat-resistant and regeneratable filter body for retaining particles from a gas flow flowing through the filter body, comprising: layers of gas-impermeable material forming flow guide surfaces defining mutually separate flow paths dividing a gas flow into a plurality of mutually separate partial gas flows and guiding the plurality of partial gas flows in a flow direction; and at least two filter devices including a first filter device and a second filter device disposed in succession in the flow direction in each of the mutually separate flow paths such that each of the partial gas flows first passes through the first filter device and then passes through the second filter device, the at least two filter devices having different filter openings with sizes decreasing in the flow direction, and at least one of the at least two filter devices being formed of alternate layers of filter material and the layers of gas-impermeable material (Maus, Claim 1). In other words, nothing in Maus anticipate that a plurality of flat filtering plates is alternated into the corrugated filtering plates to overlap with corrugated filtering plates in a '**Z' shape manner**' so as to form a filter stack of the flat filtering plates and the corrugated filtering plates, wherein a height of each layer of the filter stack is ranged between **2-10 mm** and a crest interval of each of the corrugated filtering plates is ranged between **4-20 mm**.

(C) The examiner is of the view that the numerical requirements of the originally filed claims 3, 6, 8, 9 contains no disclosure of either the critical nature of these requirements or any unexpected result, rendering the recited requirements arbitrary and obvious. The applicant respectfully disagrees. The applicant respectfully submits that the relative dimensions of the fluid filter, and the filter assembly in particular, is of crucial importance in affecting the effectiveness of the filtering performance, and the suitability of its use in particular applications, because the use of a fluid filter in a particular appliance or machine would affect the efficiency of that appliance or machine (because of the pressure drop between the filter). For example, for a particulate trap installed in a vehicle, the dimension of the filter will definitely affect the efficiency of the exhaustion of gas and therefore affect the efficiency of the entire vehicle, yet increasing uncontrolled emission of exhausted gas will definitely bring an adverse impact to the environment. As such, one skill in the art would have known that there exists an inherent tension between the effectiveness of filtering performance and its effect on the appliance or machine in which the filter operates. An optimal performance of the fluid filter, therefore, depends on an optimal dimension range and the structural construction of the various components. These are hardly "arbitrary and therefore obvious".

(D) As a matter of fact, the object of Maus's invention is to provide a **heat-resistant and regeneratable filter body** with flow paths and a process for producing the filter body, in which the body combines a high level of filter capacity with low pressure drops in a filtration effect and in terms of through-flow, production thereof is to be possible in a small number of working steps and the process permits a particularly labor-saving structure with respect to filter bodies. The problems identified by Maus concerns with undesirable pressure drop in the filter block itself, yet the solution come up with Maus does not specify precise structure of the instant invention as recited in claims 10 and 13. The fact points to the unobvious nature of the instant invention.

(E) The applicant respectfully submits that the examiner did not reject claims 1-9 under 35USC103(a), yet there are structural differences (as conceded by the examiner) between the instant invention and the filter body disclosed in Maus. The applicant respectfully that the differences between the instant invention and Maus are

not obvious since there is nothing in Maus to suggest, teach or motivate the instant inventions as recited in the newly drafted independent claims 10 and 13.

(F) Maus discloses that at least some of the filter devices have filtering openings with sizes decreasing in direction of flow direction. Presumably, this construction is for minimizing pressure drop of the flowing fluid (Maus, Col. 15, Claim 2). The instant invention as recited in claims 10 and 13 do not require such construction for minimizing pressure drop of the flowing fluid.

(G) Regarding the newly drafted claim 13, Maus fails to anticipate a fluid filter, comprising:

an outer casing;

a plurality multi-layer corrugated filtering rings;

a plurality of multi-layer flat filtering rings; and

a central tube, wherein an innermost layer of said flat filtering ring is welded onto said central tube, an outermost layer of said flat filtering ring is welded onto an inner surface of said outer casing, wherein said multi-layer corrugated filter rings are coaxially alternated within said flat filtering rings and formed with a zigzag manner, wherein side edges of each of said corrugated filtering rings are respectively welded onto neighboring flat filtering rings so as to form a continuous filter core with "Z" shaped side endings, wherein two sides of said Z shaped side endings of said filter core are alternatively applied as fluid inlet and fluid outlet in applications, wherein each of said corrugated filtering rings is reserved with two side plain edges and remaining portion of said corrugated filtering rings is prepared corrugated ridge, said plain edge is sized **between 3-8 mm**.

(H) The applicant respectfully submits that from a policy standpoint, competitors of the applicant would not manufacture, sell and use the inventions disclosed in Maus. Rather, they would manufacture, sell and use the instant invention as claimed in the newly drafted claims 10-16. Since the purpose of a developed patent system is to promote technology advancement and encouragement of inventions, it is submitted that the rejections set forth in the Office Action should be withdrawn and

patent protection of the instant invention should be granted in order to further the common goal of providing incentives for future development in the relevant area of technology.

The Cited but Non-Applied References

The cited but not relied upon references have been studied and are greatly appreciated, but are deemed to be less relevant than the relied upon references.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the rejection are requested. Allowance of claims 10-16 at an early date is solicited.

patent protection of the instant invention should be granted in order to further the common goal of providing incentives for future development in the relevant area of technology.


The Cited but Non-Applied References

The cited but not relied upon references have been studied and are greatly appreciated, but are deemed to be less relevant than the relied upon references.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the rejection are requested. Allowance of claims 10-16 at an early date is solicited.

Should the examiner believe that anything further is needed in order to place the application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Raymond Y. Chan
Reg. Nr.: 37,484
108 N. Ynez Ave.
Suite 128
Monterey Park, CA 91754
Tel.: 1-626-571-9812
Fax.: 1-626-571-9813

CERTIFICATE OF MAILING

I hereby certify that this corresponding is being deposited with the United States Postal Service by First Class Mail, with sufficient postage, in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on the date below.

Date: 12/10/2008

Signature: 

Person Signing: Raymond Y. Chan